

ARIZONA AGRICULTURAL EXPERIMENT STATION
TUCSON, ARIZONA

AND

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
PLANT SCIENCES DIVISION
WASHINGTON, D. C.

AND

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
CROPS RESEARCH DIVISION
BELTSVILLE, MARYLAND

NOTICE OF RELEASE OF CATALINA BOER LOVEGRASS

The Arizona Agricultural Experiment Station, the Plant Sciences Division, Soil Conservation Service, U. S. Department of Agriculture, and the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture, announce the release of Catalina boer lovegrass. The variety resulted from cooperative research of these three agencies at Tucson, Arizona. It was developed by L. Neal Wright, Forage and Range Research Branch, Crops Research Division. The Soil Conservation Service provided facilities and participated in the assembly and evaluation. The Arizona Agricultural Experiment Station cooperated in the evaluation.

Catalina boer lovegrass is an apomictic line previously tested under the experimental designation 3-17. It traces to PI 203347, an accession from Pretoria, Union of South Africa, received in 1952 as Eragrostis curvula (Schrader) Nees. In the United States, boer lovegrass has been identified erroneously as E. chloromelas Nees. but is evidently a type of E. curvula. These two species integrate completely into each other.

A total of 16 PI accessions of boer lovegrass underwent testing for seedling drought tolerance under program-controlled environment in growth chambers. Among 50,000 seedlings, 216 survived. Seed was harvested from the interpollinating surviving plants in isolation. Their progenies were retested. Among these progenies, line 3-17 was found to be superior in seedling drought tolerance. It was tested under Arizona rangeland conditions in 1967 and 1968 in comparison with A-84 boer lovegrass and Lehmann lovegrass. Catalina was consistently superior in stand establishment to A-84 and equalled Lehmann lovegrass at four range sites. Its forage yield has been 30% higher and of higher quality than Lehmann lovegrass under range conditions.

10-72

This

be

E. curvula

ARS

Records.

HW E

Catalina is expected to be adapted in the semiarid and arid areas of the Southwest, particularly at elevations below 4600 feet (1400 m) and with minimum annual precipitation of 12 inches (30 cm) rainfall. Foundation seed of Catalina is being maintained by the Arizona Agricultural Experiment Station, Tucson, Arizona 85721. Limited certified seed is expected to be available for range seeding in 1970. USDA has no certified seed for distribution.

Suggested release date for Catalina is August 15, 1969.

Alan J. McPherson
 Acting Director
 Arizona Agricultural Experiment Station

July 25, 1969
 Date

Danell M. Whitt
 Director
 Plant Sciences Division, SCS
 U. S. Department of Agriculture

July 21, 1969
 Date

Hugo O. Graumann
 Acting Director
 Crops Research Division, ARS
 U. S. Department of Agriculture

July 30, 1969
 Date